



UNIVERSITY OF
PATRAS
ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ

DEPARTMENT OF PHARMACY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY OF PATRAS
SCHOOL OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
POSTGRADUATE PROGRAM: **DRUG DESIGN AND DEVELOPMENT**

COURSE TITLE: RESEARCH METHODOLOGY AND ETHICS
CODE: DPHA_5

**RESEARCH METHODOLOGY AND ETHICS
COURSE OUTLINE**

1. GENERAL

SCHOOL	HEALTH SCIENCES		
ACADEMIC UNIT	DEPARTMENT OF PHARMACY		
PARTICIPATING INSTITUTIONS	-		
TITLE of POSTGRADUATE PROGRAM	DRUG DESIGN AND DEVELOPMENT		
LEVEL	POSTGRADUATE		
COURSE CODE	DPHA-5	SEMESTER	A'
COURSE TITLE	RESEARCH METHODOLOGY AND ETHICS		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures	2	4	
COURSE TYPE	General background, Special background (Bioethics), Skills development		
PREREQUISITE COURSES	None		
LANGUAGE of INSTRUCTION and EXAMINATIONS	Greek / English		
COURSE OFFERED to ERASMUS STUDENTS	Yes		
COURSE (URL)	http://www.pharmacy.upatras.gr/images/DS/DPHA_5_EN.pdf		

2. LEARNING OUTCOMES

Learning Outcomes
<p>This course aims that students acquire knowledge, skills and competences related to level 7 of the European Qualifications Framework for Lifelong Learning. In particular, the course aims at students' learning and familiarizing with the concepts of Research Methodology (approaches, design, collection, processing, analysis of data), as well as its Ethical aspect, as it should be applied in any research experimental approach to the solution of a scientific problem (good practices, disdain of malpractices, conflict of interest, personal data, etc.).</p> <p>Upon successful completion of the course, students:</p> <ol style="list-style-type: none"> will have acquired the necessary knowledge to understand the legal, and ethical framework governing scientific research. will be able to complete the design of an experimental research project, starting from the literature review, drafting a research protocol, writing the methodology, processing the results, up to evaluating and drawing the final conclusions.

<ol style="list-style-type: none"> 3. will have gained experience in the descriptive indexing of a large amount of information and the "art" of presenting a topic to a specialized and / or non-relevant audience. 4. will have developed the study skills necessary for their further scientific training and professional development.
<p>General Competences</p>
<ul style="list-style-type: none"> • Search for, analysis and synthesis of data and information, with the use of the necessary technology • Working independently • Team work • Decision-making • Respect for difference and multiculturalism • Showing social, professional and ethical responsibility and sensitivity to gender issues • Working in an international environment • Working in an interdisciplinary environment • Production of free, creative and inductive thinking

3. SYLLABUS

<ol style="list-style-type: none"> 1. Introduction to Research Methodology 2. Phases and Steps of Conducting a Study & Selecting or Identifying Research Problems 3. Literature Review 4. Quantitative research in Health Sciences 5. Qualitative research in Health Sciences 6. Sampling 7. Data Analysis 8. Writing a Research Report – Dissertation 9. Therapeutic and Non-Therapeutic Clinical Research 10. Topics for Discussion: Orphan Drugs, Placebo, Nocebo, Research in Minorities 11. Research Practices - Scientific Education 12. Discrediting Unethical Research Practices - Conflict of Interest 13. Genethics: Ethics in personalized medicine and therapeutics 14. Ethics in laboratory animals research

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to face
USE of INFORMATION and COMMUNICATIONS TECHNOLOGY	Use of ICT in teaching and communication with students (i.e., e-class, emails, PowerPoint presentations)

TEACHING METHODS	Activity	Semester Workload
	Lectures	13
	Directed Study	35
	non-Directed Study	52
	Course Total (25 hours of work-load per ECTS credit)	100
STUDENT PERFORMANCE EVALUATION	Language of Evaluation: Greek / English	
	Written exams <ul style="list-style-type: none"> Multiple choice questionnaires, Short answer questions, Open ended questions 	

5. RECOMMENDED BIBLIOGRAPHY

Suggested Bibliography:

1. Bowling, A., 2014. Research Methods In Health: Investigating Health And Health Services (4th edition). Open University Press. UK.
2. Brink, H., van der Walt, Chr., van Rensburg, G., 2018. Fundamentals of research methodology for health care professionals (4th edition). Juta & Company Ltd. South Africa.
3. Research Ethics for Scientists - A Companion for Students C. Neal Stewart; John Wiley & Sons, Ltd (2011)
4. The Student's Guide to Research Ethics Paul Oliver; Mc Graw Hill, Open University Press (2010)
5. The Ethics of Bioethics - Mapping the Moral Landscape Lisa A. Eckenwiler, Felicia G. Cohn; The Johns Hopkins University Press (2007)